

Express Mail Label No. EL 789 848 749 US

PATENT

Date of Deposit is March 1, 2002

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Box: Patent Application, Washington, D. C. 20231.

Atty. Docket No.
DX0936KB

CN 028008

By: Lois E. Miller 3-1-02
Lois E. Miller, date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HOEK & SEDGWICK

Serial No.: to be assigned

Filed: March 1, 2002

For: NOVEL USES OF MAMMALIAN OX2
PROTEIN AND RELATED REAGENTS

Examiner: not assigned

Art Unit: not assigned

**USE OF PRIOR SEQUENCE SUBMISSION
UNDER 37 CFR §1.821(e)**

Palo Alto, California 94304

March 1, 2002

5 Assistant Commissioner for Patents
Box: Patent Application
Washington, D.C. 20231

10 Sir:

The attached copy of the Sequence Submission is for the patent application submitted herewith. The computer readable form in this application is equivalent to that filed in parent application USSN 09/547,432. In accordance with 37 CFR 1.821(e), please use the computer readable form submitted in that application on April 12, 2000, as the computer readable form for the instant application. It is understood that the Patent and Trademark Office will make the necessary changes in application number and filing date for computer readable form that will be used for the instant application.

20

Respectfully submitted,

Dated: March 1, 2002

By: Sheela Mohan-Peterson
Sheela Mohan-Peterson
Attorney for Applicants
Reg. No. 41,201

25

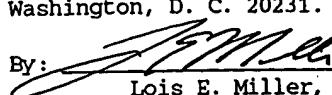
30 DNAX Research Institute
901 California Avenue
Palo Alto, California 94304-1104
Tel: (650) 496-6400
Fax: (650) 496-1200

Express Mail Label No. 367 648 268 US

Date of Deposit is April 12, 2000

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Box: Patent Application, Washington, D. C. 20231.

By:


Lois E. Miller,

4-12-00

date

PATENT/DX0936K

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Robert M. HOEK and
Jonathan D. SEDGWICK

Serial No.: not yet assigned

Filed: April 12, 2000

For: NOVEL USES OF MAMMALIAN OX2
PROTEIN AND RELATED
REAGENTS

Examiner: not assigned

Art Unit: not assigned

COMPUTER READABLE SEQUENCE
SUBMISSION

Palo Alto, California 94304

April 12, 2000

5

Assistant Commissioner for Patents
Box: Patent Application
Washington, D.C. 20231

10

Sir:

COMPLIANCE WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

15

In order to comply with requirements for patent applications containing nucleotide sequence and/or amino acid sequence disclosures, for the above-identified application, in accordance with 37 CFR § 1.821 - 1.825, Applicants hereby submit: (1) a write-protected diskette containing a computer-readable submission for the "Sequence Listing"; and (2) a "Sequence Listing" paper copy of the contents of the diskette.

REMARKS

25

Enclosed is a write protected floppy diskette with the sequence listing generated by the Patent Office's PATENTIN program. The Diskette should comply with the requirements of

37 CFR §1.824 and is IBM PC compatible with a PC-DOS/MS-DOS operating system. If the diskette has been damaged, please call Applicants and a replacement diskette will be provided. A hard paper copy printout of the diskette is attached thereto.

5 I hereby state the informational contents of the paper and computer readable copies of the Sequence Listing, submitted in accordance with 37 CFR 1.821(c) and (e), respectively, are believed to be the same. This submission introduces no new matter, since enclosed sequences are the same as sequences which
10 were submitted in priority documents.

Applicants have invested over one hour of significant labor and care in preparing the present submission. The enclosed items are a bona fide effort to bring the present application into full compliance with the rules for sequence submissions.
15 Should this not be the case, Applicants respectfully request notification of specific deficiencies and an opportunity for remedy, as described in 37 CFR 1.135(c).

20 Applicants believe that no fees are required; however, if any fees are required by the present Response, the Commissioner is authorized to charge any fees or credit any overpayment to DNAX Research Institute Deposit Account No. 04-1239.

Respectfully submitted,

25

Dated: April 12, 2000

By: Edwin P. Ching
Edwin P. Ching
Attorney for Applicants
Reg. No. 34,090

30

enclosures and attachments:

one write-protected diskette (CRM)
paper copy of contents of diskette (4 pages)

35

DNAX Research Institute
901 California Avenue
Palo Alto, California 94304-1104
40 Tel: (650) 852-9196
Fax: (650) 496-1200

For 3½" Disk

 **Pull Tab to Open**

 **AVERY™**

Disk Mailer

Fri

Express Mail Label No. EL 367 648 268 US

Date of Deposit is April 12, 2000

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Box: Patent Application, Washington, D. C. 20231.

By:

 Lois E. Miller

4-12-00
date

PATENT/DX0936K

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Robert M. HOEK and
Jonathan D. SEDGWICK

Serial No.: not yet assigned

Filed: April 12, 2000

For: NOVEL USES OF MAMMALIAN OX2
PROTEIN AND RELATED
REAGENTS

Examiner: not assigned

Art Unit: not assigned

COMPUTER READABLE SEQUENCE
SUBMISSION

Palo Alto, California 94304

April 12, 2000

Assistant Commissioner for Patents
Box: Patent Application
Washington, D.C. 20231

MAIL



CONFIDENTIAL
PC COMPATIBLE IBM MS/DOS

Atty. Docket No.: DX0936K

NOVEL USES OF MAMMALIAN OX2
PROTEIN AND RELATED REAGENTS

HOEK & SEDGWICK

USSN: to be assigned

filed: April 12, 2000

Disk recordation date:

April 12, 2000

SEQUENCE SUBMISSION

SEQ ID NO: 1 is primate, e.g., human, OX2 sequence.
SEQ ID NO: 2 is rodent, e.g., mouse, OX2 sequence.
5 SEQ ID NO: 3 is rodent, e.g., rat, OX2 sequence.

<110> Schering Corporation

10 <120> Novel Uses of Mammalian OX2 Protein and Related
Reagents

<130> DX0936K

<140>

<141>

15 <160> 3

<170> PatentIn Ver. 2.0

<210> 1

<211> 274

<212> PRT

20 <213> primate.

<400> 1

Val Ile Arg Met Pro Phe Ser His Leu Ser Thr Tyr Ser Leu Val Trp
1 5 10 15

25 Val Met Ala Ala Val Val Leu Cys Thr Ala Gln Val Gln Val Val Thr
20 25 30

Gln Asp Glu Arg Glu Gln Leu Tyr Thr Thr Ala Ser Leu Lys Cys Ser
35 40 45

Leu Gln Asn Ala Gln Glu Ala Leu Ile Val Thr Trp Gln Lys Lys Lys
50 55 60

Ala Val Ser Pro Glu Asn Met Val Thr Phe Ser Glu Asn His Gly Val
65 70 75 80

Val Ile Gln Pro Ala Tyr Lys Asp Lys Ile Asn Ile Thr Gln Leu Gly
85 90 95

30 Leu Gln Asn Ser Thr Ile Thr Phe Trp Asn Ile Thr Leu Glu Asp Glu
100 105 110

Gly Cys Tyr Met Cys Leu Phe Asn Thr Phe Gly Phe Gly Lys Ile Ser
115 120 125

40 Gly Thr Ala Cys Leu Thr Val Tyr Val Gln Pro Ile Val Ser Leu His
130 135 140

Tyr Lys Phe Ser Glu Asp His Leu Asn Ile Thr Cys Ser Ala Thr Ala
145 150 155 160

Arg Pro Ala Pro Met Val Phe Trp Lys Val Pro Arg Ser Gly Ile Glu
165 170 175

45 Asn Ser Thr Val Thr Leu Ser His Pro Asn Gly Thr Thr Ser Val Thr
180 185 190

Ser Ile Leu His Ile Lys Asp Pro Lys Asn Gln Val Gly Lys Glu Val
195 200 205

50 Ile Cys Gln Val Leu His Leu Gly Thr Val Thr Asp Phe Lys Gln Thr
210 215 220

Val Asn Lys Gly Tyr Trp Phe Ser Val Pro Leu Leu Ser Ile Val
225 230 235 240

Ser Leu Val Ile Leu Leu Val Leu Ile Ser Ile Leu Leu Tyr Trp Lys
245 250 255

55 Arg His Arg Asn Gln Asp Arg Gly Glu Leu Ser Gln Gly Val Gln Lys
260 265 270

Met Thr

5 <210> 2
 <211> 278
 <212> PRT
 <213> rodent

10 <400> 2
 Met Ala Ser Leu Val Phe Arg Arg Pro Phe Cys His Leu Ser Thr Tyr
 1 5 10 15
 Ser Leu Ile Trp Gly Met Ala Ala Val Ala Leu Ser Thr Ala Gln Val
 20 25 30
 Glu Val Val Thr Gln Asp Glu Arg Lys Ala Leu His Thr Thr Ala Ser
 35 40 45
 Leu Arg Cys Ser Leu Lys Thr Ser Gln Glu Pro Leu Ile Val Thr Trp
 50 55 60
 Gln Lys Lys Lys Ala Val Ser Pro Glu Asn Met Val Thr Tyr Ser Lys
 65 70 75 80
 Thr His Gly Val Val Ile Gln Pro Ala Tyr Lys Asp Arg Ile Asn Val
 85 90 95
 Thr Glu Leu Gly Leu Trp Asn Ser Ser Ile Thr Phe Trp Asn Thr Thr
 100 105 110
 Leu Glu Asp Glu Gly Cys Tyr Met Cys Leu Phe Asn Thr Phe Gly Ser
 115 120 125
 Gln Lys Val Ser Gly Thr Ala Cys Leu Thr Leu Tyr Val Gln Pro Ile
 130 135 140
 Val His Leu His Tyr Asn Tyr Phe Glu Asp His Leu Asn Ile Thr Cys
 145 150 155 160
 Ser Ala Thr Ala Arg Pro Ala Pro Ala Ile Ser Trp Lys Gly Thr Gly
 165 170 175
 Thr Gly Ile Glu Asn Ser Thr Glu Ser His Phe His Ser Asn Gly Thr
 180 185 190
 Thr Ser Val Thr Ser Ile Leu Arg Val Lys Asp Pro Lys Thr Gln Val
 195 200 205
 Gly Lys Glu Val Ile Cys Gln Val Leu Tyr Leu Gly Asn Val Ile Asp
 210 215 220
 Tyr Lys Gln Ser Leu Asp Lys Gly Phe Trp Phe Ser Val Pro Leu Leu
 225 230 235 240
 Leu Ser Ile Val Ser Leu Val Ile Leu Leu Val Leu Ile Ser Ile Leu
 245 250 255
 Leu Tyr Trp Lys Arg His Arg Asn Gln Glu Arg Gly Glu Ser Ser Gln
 260 265 270
 Gly Met Gln Arg Met Lys
 275

45 <210> 3
 <211> 278
 <212> PRT
 <213> rodent

50 <400> 3
 Met Gly Ser Pro Val Phe Arg Arg Pro Phe Cys His Leu Ser Thr Tyr
 1 5 10 15
 Ser Leu Leu Trp Ala Ile Ala Ala Val Ala Leu Ser Thr Ala Gln Val
 20 25 30
 Glu Val Val Thr Gln Asp Glu Arg Lys Leu Leu His Thr Thr Ala Ser
 35 40 45
 Leu Arg Cys Ser Leu Lys Thr Thr Gln Glu Pro Leu Ile Val Thr Trp
 50 55 60
 Gln Lys Lys Lys Ala Val Gly Pro Glu Asn Met Val Thr Tyr Ser Lys
 65 70 75 80

Ala His Gly Val Val Ile Gln Pro Thr Tyr Lys Asp Arg Ile Asn Ile
85 90 95
Thr Glu Leu Gly Leu Leu Asn Thr Ser Ile Thr Phe Trp Asn Thr Thr
100 105 110
5 Leu Asp Asp Glu Gly Cys Tyr Met Cys Leu Phe Asn Met Phe Gly Ser
115 120 125
Gly Lys Val Ser Gly Thr Ala Cys Leu Thr Leu Tyr Val Gln Pro Ile
130 135 140
Val His Leu His Tyr Asn Tyr Phe Glu Asp His Leu Asn Ile Thr Cys
145 150 155 160
10 Ser Ala Thr Ala Arg Pro Ala Pro Ala Ile Ser Trp Lys Gly Thr Gly
165 170 175
Ser Gly Ile Glu Asn Ser Thr Glu Ser His Ser His Asn Gly Thr
180 185 190
15 Thr Ser Val Thr Ser Ile Leu Arg Val Lys Asp Pro Lys Thr Gln Val
195 200 205
Gly Lys Glu Val Ile Cys Gln Val Leu Tyr Leu Gly Asn Val Ile Asp
210 215 220
Tyr Lys Gln Ser Leu Asp Lys Gly Phe Trp Phe Ser Val Pro Leu Leu
225 230 235 240
20 Leu Ser Ile Val Ser Leu Val Ile Leu Leu Val Leu Ile Ser Ile Leu
245 250 255
Leu Tyr Trp Lys Arg His Arg Asn Gln Glu Arg Gly Glu Ser Ser Gln
260 265 270
25 Gly Met Gln Arg Met Lys
275